

Remarks/Arguments

A. Claims in the Case

Claims 1-39 are pending. Claims 1, 3, 5, 10-14, 16, 20-24, 27, 31-39 have been amended.

B. The Claims Are Not Indefinite under 35 U.S.C. §112, Second Paragraph

The Examiner rejected claims 1, 10-12, 22, 23, 33, and 36 as being indefinite under 35 U.S.C. §112, Second Paragraph.

With respect to claim 1, the Office Action states: "There appears to be something missing after "data". Applicant has amended claim 1, 12, and 23 for clarification to recite in part: "one or more data element values in a set of transaction-related data." Applicant respectfully requests removal of the §112 rejection of claim 1.

With respect to claim 10, the Office Action states that the limitation "processing key value of one of the one or more data element values" is unclear. Applicant has amended claims 10 and 36 for clarification to recite in part: "transferring one of the one or more data element values read from the transaction-related data to the processing key value". Applicant respectfully requests removal of the §112 rejections of claims 10 and 36.

With respect to claims 11 and 22, the Office Action appear to take the position that the limitation "wherein the search mask is defined by the user of the" is unclear. Applicant has amended claims 11, 22, and 33 for clarification to recite in part: "wherein the search mask fields

or the search mask field values are defined by the user of the FSO computer system". Applicant respectfully requests removal of the §112 rejections of claims 11, 22, and 33.

With respect to claims 12 and 36, the Office Action states that "it is vague and unclear what kind of 'system'". Applicant has amended claims 12 and 36 for clarification to recite in part: "A computer system". Applicant respectfully requests removal of the §112 rejections of claims 12 and 36.

C. Claim Objections

The Examiner objected to claims 1, 12, 23, 34, 36, and 38 based on the use of the acronym "FSO". Applicant has amended each of these independent claims to recite "Financial Service Organization (FSO)" the first time the acronym is used in the body of the claims. Applicant requests removal of the objections relative to these claims.

D. The Claims Are Not Obvious Over McElhiney Under 35 U.S.C. §103(a)

Claims 1-8, 12-19, and 23-30 were rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 5,710,915 to McElhiney (hereinafter referred to as "McElhiney"). Applicant respectfully disagrees with these rejections.

In order to reject a claim as obvious, the Examiner has the burden of establishing a *prima facie* case of obviousness. *In re Warner et al.*, 379 F.2d 1011, 154 USPQ 173, 177-178 (CCPA 1967). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974), MPEP § 2143.03.

Amended claim 1 describes a combination of features including, but not limited to:

“wherein the key definition describes a location of one or more data element values in a set of transaction-related data, wherein the key definition is defined by a user of the Financial Service Organization (FSO) computer system during a configuration of the FSO computer system, wherein the configuration of the FSO computer system occurs when a software program on the FSO computer system is initially set up for processing FSO transactions”.

Support for the amendments to claim 1 can be found, for example, in Applicant's specification, which states:

In one embodiment, the key definitions, key values, processing parameter values, and search masks may be constructed and stored during the configuration of the FSO system. Configuration of the FSO system may occur at the time the FSO system software programs and databases are initially installed and set up for processing FSO transactions.
(Specification, page 9, lines 6-9)

The cited references do not appear to teach or suggest the above-quoted feature of claim 1, in combination with the other features of the claim.

McElhiney states:

As described above, the detail table contains all of the information that is read-only (i.e. not searched) within the input table, and the search table contains the fields which may also be used for selection criteria or aggregation functions. Thus, the present invention splits a database table into two tables, one containing the retrieve-only data, and one containing the remaining fields which can be used for selecting or retrieval.

After creating the search table, block 204 defines a unique key value for each row. This value may be any arbitrary unique value, but the simplest implementation is the use of a serially assigned value starting at 1.
(McElhiney, column 5, lines 22-29)

McElhiney discloses a database table split into two tables, one with retrieve-only data and another containing fields that can be used for selecting or retrieval. A key value is defined for each row of the search table. McElhiney does not appear to teach or suggest a user of an FSO computer system defining a key definition that describes a location of data element values in a set of transaction-related data during configuration of the FSO computer system, the configuration occurring when a software program on the FSO computer system is initially set up for processing FSO transactions.

Amended claim 12 describes a combination of features including, but not limited to: “wherein the key definition describes a location of one or more data element values in a set of transaction-related data, wherein the key definition is defined by a user of the FSO computer system during a configuration of the FSO computer system, wherein the configuration of the FSO computer system occurs when a software program on the FSO computer system is initially set up for processing FSO transactions”. For similar reasons to those set forth above with respect to claim 1, Applicant respectfully submits that claim 12 is allowable over the cited art.

Amended claim 23 describes a combination of features including, but not limited to: “wherein the key definition describes a location of one or more data element values in a set of transaction-related data, wherein the key definition is defined by a user of the Financial Service Organization (FSO) computer system during a configuration of the FSO computer system, wherein the configuration of the FSO computer system occurs when a software program on the FSO computer system is initially set up for processing FSO transactions”. For similar reasons to those set forth above with respect to claim 1, Applicant respectfully submits that claim 23 is allowable over the cited art.

Applicant submits that, for at least the reasons discussed above, claims 1, 12, and 23 and

the claims depending thereon are patentable over the cited art. Applicant therefore respectfully requests removal of the 35 U.S.C. §103(a) rejections of these claims.

Applicant submits that many of claims dependent on claims 1, 12, and 23 are independently patentable. For example, amended claim 5 recites: "wherein each of the plurality of key definitions in the database is associated with one of the plurality of processing parameter tables in the database, wherein the plurality of key definitions associated with one of the plurality of processing parameter tables is stored in a key definition table, wherein reading the key definition from the database comprises reading the key definition for the processing parameter table from the key definition table". The cited art does not appear to teach or suggest at least these features of claim 5, in combination with the other features of the claim.

Claim 9 recites: "reading a search mask from the database, wherein the search mask comprises one or more search mask fields, wherein each of the one or more search mask fields corresponds to one of the one or more data element values described in the key definition". The cited art does not appear to teach or suggest at least this feature of claim 9, in combination with the other features of the claim.

The Office Action takes the position that U.S. Patent No. 5,864,679 to Kanai et al. ("Kanai") teaches the above-quoted feature of claim 9. Applicant respectfully disagrees with this position.

Kanai states:

the library function transmits the process ID, the data ID to be accessed, a flag indicating which library has been called up, a parameter for distinguishing a plurality of series processings defined in one process which will be described below, and parameters necessary in the access processing. The parameter for distinguishing the series processings can be given by a numerical value which is uniquely determined and assigned for each processing to be carried out in the process.

The access request reception unit 201 transmits the process ID, the data ID, the parameter for distinguishing the series processings, and the flag indicating the library to the correlation information generation unit 231, while transmitting the data ID to be accessed and the parameter necessary for the data access to the data access unit 207. The data access unit 207 searches through the index in the data storage information memory unit 205 as shown in FIG. 79A by using the received data ID as the key. The index of FIG. 79A has a tree structure using the data ID as the key, in which the flags indicating on which processor this data is stored, at which position of which file this data is stored when this data is present on this processor, and whether the lock is set with respect to this data or not are stored in the leaves portion of the tree structure.

When it is recognized that this data is present in the processor associated with this data management unit as a result of the index search, the data access unit 207 makes access to this data according to the search result, and the access result is transmitted to the library function.

(Kanai, column 48, line 46 to column 49 line 7)

The portions of Kanai cited in the Office Action appear to teach a transaction making access to a database (Kanai, column 48, lines 32-41). A library function transmits a process ID, a data ID to be accessed, a flag indicating which library has been called up, a parameter for distinguishing a plurality of series processings, and parameters necessary in the accessing processings (Kanai, column 48, lines 46-51). A data access unit searches through an index using the data ID as a key (Kanai, column 48, lines 46-51). Kanai does not appear to teach or suggest reading a search mask from a database, wherein the search mask comprises search mask fields corresponding to one of the data element values described in the key definition, in combination with the other features of claim 9.

Amended claim 10 recites: “transferring one of the one or more data element values read from the transaction-related data to the processing key value in response to a search mask field value indicating that the data element value from the transaction-related data is to be written to the processing key value; and transferring a low collating value to the processing key value in

response to the search mask field value indicating that the low collating value is to be written to the processing key value". The cited art does not appear to teach or suggest at least this feature of claim 10, in combination with the other features of the claim.

Claim 10 is directed to a combination of features including transferring a low collating value to a processing key value. For example, as stated in Applicant's specification.

In one embodiment, a wildcard mask field value in a mask field may specify that, when constructing a processing key value from the data element values in a customer account data set during processing of the customer account data set, the key element value in the processing key value corresponding to the mask field will be set to the low collating value for the data type of the key element. For example, key elements of numeric data type may use zero (0) as a low collating value, and character fields may use spaces, or blank characters, as low collating values. Other key element types may have low collating values specific to the type. In the embodiment illustrated in Figure 3a, an equal mask field value is represented by an equal sign ("="), and a wildcard mask field value is represented by an asterisk ("*"). In this example, search mask 524 includes one search mask field for each data element in key definition 510, where the search mask fields for data elements x and y are set to equal mask field values. (Applicant's specification, page 23, line 25 to page 24, line 8)

The Office Action takes the position that Kanai teaches the above-quoted feature of claim 10. Applicant respectfully disagrees with this position. The portions of Kanai cited in the Office Action appear to disclose a probabilistic selection unit selecting an optimum transaction processor number (Kanai, column 31, lines 5-12). If the probabilistic selection unit does not select a processor, an arbitrary transaction processor selection unit selects an arbitrary processor. (Kanai, column 31, lines 43-46). The arbitrary processor selection unit may give a higher priority to a selection of the transaction processor predicted to have a lower load (Kanai, column 31, lines 50-62). Kanai does not appear to teach or suggest transferring a data element value read from the transaction-related data to the processing key value in response to a search mask field value indicating that the data element value is to be written to the processing key value; and transferring a low collating value to the processing key value in response to the search mask field

value indicating that the low collating value is to be written to the processing key value, in combination with the other features of claim 10.

E. The Claims Are Not Obvious Over McElhiney in View of Kanai Under 35 U.S.C. §103(a)

Claims 9-11, 20-22, 31-39 were rejected under 35 U.S.C. §103(a) as being obvious over McElhiney in view of Kanai. Applicant respectfully disagrees with these rejections.

Amended claim 34 describes a combination of features including, but not limited to:

reading a search mask from the database, wherein the search mask comprises one or more search mask fields, wherein each of the one or more search mask fields corresponds to one of the one or more data element values described in the key definition, and wherein each of the one or more search mask fields comprises a search mask field value;

transferring one of the one or more data element values read from the transaction-related data to a processing key value in response to a search mask field value indicating that the data element value from the transaction-related data is to be written to the processing key value, and;

transferring a low collating value to the processing key value in response to the search mask field value indicating that the low collating value is to be written to the processing key value;

For at least the reasons to those set forth above with respect to claims 9 and 10, Applicant respectfully submits that claim 34 is allowable over the cited art.

Amended claim 36 describes a combination of features including, but not limited to:

reading a search mask from the database, wherein the search mask comprises one or more search mask fields, wherein each of the one or more search mask fields corresponds to one of the one or more data element values described in the key definition, and wherein each of the one or more search mask fields comprises a search mask field value;

transferring one of the one or more data element values read from the

transaction-related data to a processing key value in response to a search mask field value indicating that the data element value from the transaction-related data is to be written to the processing key value, and;
transferring a low collating value to the processing key value in response to the search mask field value indicating that the low collating value is to be written to the processing key value;

For at least the reasons to those set forth above with respect to claims 9 and 10, Applicant respectfully submits that claim 36 is allowable over the cited art.

Amended claim 38 describes a combination of features including, but not limited to:

reading a search mask from the database, wherein the search mask comprises one or more search mask fields, wherein each of the one or more search mask fields corresponds to one of the one or more data element values described in the key definition, and wherein each of the one or more search mask fields comprises a search mask field value;
transferring one of the one or more data element values read from the transaction-related data to a processing key value in response to a search mask field value indicating that the data element value from the transaction-related data is to be written to the processing key value; and
transferring a low collating value to the processing key value in response to the search mask field value indicating that the low collating value is to be written to the processing key value;

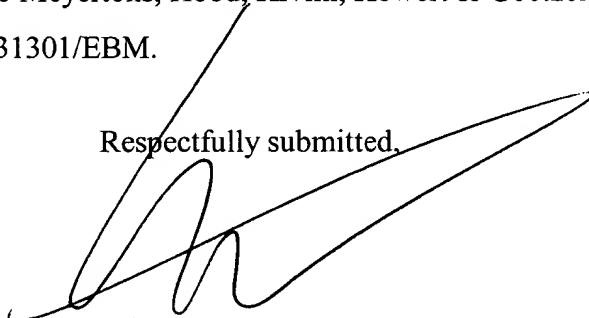
For at least the reasons to those set forth above with respect to claims 9 and 10, Applicant respectfully submits that claim 38 is allowable over the cited art.

F. Additional Remarks

Based on the above, Applicant submits that the claims are now in condition for allowance. Favorable reconsideration is respectfully solicited.

Applicant respectfully believes no fees are due with the submission of this document. If any extension of time is required, Applicant hereby requests the appropriate extension of time. If any fees are inadvertently omitted or if any fees are required or have been overpaid, please appropriately charge or credit those fees to Meyertons, Hood, Kivlin, Kowert & Goetzel, P.C. Deposit Account Number 50-1505/5053-31301/EBM.

Respectfully submitted,



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